



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

09/280,618

03/29/1999

MAHDI S. CHAMBERS

CHAMBERS-1

6099

32498

7590

06/28/2007

CAPITOL PATENT & TRADEMARK LAW FIRM, PLLC.

ATTN: JOHN CURTIN

P.O. BOX 1995

VIENNA, VA 22183

EXAMINER

MILLS, DONALD L

ART UNIT

PAPER NUMBER

2616

MAIL DATE

DELIVERY MODE

06/28/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary**

Application No.

09/280,618

Applicant(s)

CHAMBERS, MAHDI S.

Examiner

Donald L. Mills

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 05 April 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-9, 12-31 and 33-41 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9, 12-31 and 33-41 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### *Continued Examination Under 37 CFR 1.114*

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 05 April 2007 has been entered.

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-8, 12, 13, 15-29, and 33-41 are rejected under 35 U.S.C. 102(e) as being anticipated by Lewis (US 6,442,169 B1).

Regarding claim 1, see e.g., the embodiment shown in figure 9a of Lewis. As such, applicant's DCR 110 is taught as the gateway 508 and NAS bay 902. In particular, applicant's BICR 112 is taught e.g., as CS 510 and applicant's ATM switch 114 (i.e., a second switch as claimed) is taught e.g., as NAS Bay 902. A first switch as claimed e.g., is taught as AT 106 in figure 9A. Hence note that trunk 406 supports both voice and data, see e.g., column 19, lines 44-

Art Unit: 2616

46. Voice information is sent from the second switch (i.e., NAS bay 902) to voice switch 506 over voice trunks 930, 932 and data (i.e., IP traffic) is sent from the second switch to the ISP 926 over data links 903. The determination of which bay the traffic is sent is made by CS 510(i.e., applicant's BICR); see e.g., column 29, lines 44-51 where the signaling is performed using an open architecture protocol (i.e., applicant's control link between applicant's BICR 112 and ATM switch 114). Thus the control server 510 controls the NAS (i.e., the second switch) and also supports both the first and second types of traffic. Signaling data sent from a first switch, e.g., AT switch 106 is relayed to the control server 510 via the SS7 gateway 512 (i.e., see 'the dotted lines in figure 9a). As seen in the Figure 9A, the NAS is configured to direct traffic the destination end office via the Voice Switch 506 and to ISP 948 via the WAN Protocol. Hence all the claim limitations, comprising the submitted amendments, are met.

Regarding claim 2, numerous ISUP messages are sent over the SS7 network, see e.g., column 28, lines 2.

Regarding claim 3, the control server 510 in step 1030 looks up the called party number in an internal database such that the control server 510 performs the steps of decoding the signal data, determining a called directory number and matching the called directory number with an entry of a predetermined table correlation directory numbers, traffic types, and destination locations, see e.g., column 29, lines 25-50

Regarding claim 4, as the called party number is compared to a database one skilled in the art can infer that at some point in time the database was created in order to make the comparison.

Regarding claims 5-8, see e.g., figure 9c where the internetworking trunks use the ss7 protocol and the data is converted to a second protocol based on whether the traffic type is voice or data. Thus a second protocols either the open architecture protocol as taught by the reference of the actual voice or data links as shown e.g., in figure 9c. As such, for the first protocol, see e.g., columns 28 and 27 with respect to SS7 and also column 29, lines 9-23 with respect to SS7 A links. With respect to the second protocol see e.g., column 21, lines 21-42 and column 28.

Regarding claim 12, see e.g., routers, 904 and 906, which act as remote access servers for the ISP.

Regarding claim 13, see e.g., table 6 for specific types of control signaling. In addition, note that other standards may also apply, see e.g., column 21, lines 27-51.

Regarding claim 15, see e.g., column 24, lines 5-34 with respect to ATM.

Regarding claim 16, with respect to e.g., Ethernet, DS-1 and DS-3 see e.g., figure 9a with respect to the connections.

Regarding claims 17-18, the control server also supports accounting information; see e.g., column 22, lines 25-43. Information may further be stored in database 516, see e.g., figure 9a.

Regarding claim 19, see e.g., similar reasoning for claim 1.

Regarding claim 20, see e.g., similar reasoning for claims 1 and 7.

Regarding claim 21, the control server is a BICR.

Regarding claim 22, see e.g., similar reasoning for claim 15.

Regarding claim 23, see e.g., similar reasoning for claims 1 and 7.

Regarding claim 24, see e.g., similar reasoning for claim 1.

Regarding claim 25, see e.g., similar reasoning for claim 1.

Art Unit: 2616

Regarding claim 26, see e.g., similar reasoning for claim 1.

Regarding claim 27, see e.g., the elements of the open architecture protocol.

Regarding claim 28, see e.g., similar reasoning for claim 3.

Regarding claim 29, see e.g., similar reasoning for claim 6.

Regarding claim 33, see e.g., similar reasoning for claim 12.

Regarding claim 34, see e.g., similar reasoning for claim 13.

Regarding claim 35, see e.g., similar reasoning for claim 15.

Regarding claim 36, see e.g., similar reasoning for claim 16.

Regarding claim 37, see e.g., similar reasoning for claim 17.

Regarding claim 38, see e.g., similar reasoning for claim 18.

Regarding claims 39-41, see e.g., similar reasoning for claim 1.

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lewis (US 6,442,169 B1) in view of Burns et al. (US 6,292,463 B1), hereinafter referred to as Burns.

Regarding claim 14 as explained in the rejection statement of claim 1, Lewis discloses all of the claim limitations of claim 1 (parent claim).

Lewis supports ATM but may be silent or deficient to using a switched connection and an SPVC, see e.g., column 24, lines 5-34. Burns teaches the further recited limitation above at e.g., column 1, line 15-31.

The proposed modification of the above-applied reference(s) necessary to arrive at the claimed subject matter would be to modify Lewis by clarifying that SVCs and SPVC implementations in ATM are very well known in the art and since Lewis teaches ATM it would have been obvious to use a PVC, SVC, or SPVC.

As such, examiner notes that it would have been obvious to one skilled in the art prior to applicant's invention to include the above limitation. In particular, the motivation for modifying the reference or to combine the reference teachings would be for a switched connection. In particular, Burns cures the above-cited deficiency by providing a motivation found at e.g., column 24, lines 5-34. Second, there would be a reasonable expectation of success since both references teach ATM. Thus the references either in singular or in combination teach the above claim limitation(s).

6. Claims 9, 30, and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lewis (US 6,442,169 B1) in view of Black, "ATM Foundation for Broadband Networks."

As such to claims 9, 30 and 31 as explained in the rejection statements of claims 1 and 23; Lewis discloses all of the claim limitations of claims 1 and 23 (parent claims).

Lewis supports ATM but may be silent or deficient to using Q.931 signaling in the network. In particular, Lewis teaches that the second protocol could be part of DS trunking,

Art Unit: 2616

which supports basic ISDN interface or Q.931 signaling. However, assuming the above limitation at issue is not clear, examiner also notes the following obviousness rejection as well.

Black teaches the further recited limitation above at e.g., pages 76, 84, and 86. The proposed modification of the above-applied reference(s) necessary to arrive at the claimed subject matter would be to modify Lewis by clarifying that Q.931 signaling is well known in the art, especially for both ATM and integration with SS7 networks.

As such, examiner notes that it would have been obvious to one skilled in the art prior to applicant's invention to include the above limitation. In particular, the motivation for modifying the reference or to combine the reference teachings would be to use a common communications standard where Q.931 is a common communications standard. In particular, Black cures the above-cited deficiency by providing a motivation found at pages 84 and 86. Second, there would be a reasonable expectation of success since both references teach ATM. In addition, Black teaches that ISUP, as taught by Lewis, works in conjunction with ISDN Q.931. Thus the references either in singular or in combination teach the above claim limitation(s).

### ***Response to Arguments***

7. Applicant's arguments filed 05 April 2007 have been fully considered but they are not persuasive.

#### **Rejection Under 35 USC 102**

On page 16 of the remarks, regarding claims 1, 19, 23, 39, 40, and 41, the Applicant argues Lewis does not disclose *the second switch configured to direct traffic data of the first traffic type to a destination end office and the second traffic type to another type of destination*



Art Unit: 2616

*network element.* More specifically, the Applicant argues Lewis's open architecture platform 402 bypasses the destination end office. The Examiner respectfully disagrees. The Examiner interprets the Open Architecture Platform 402 as logically equivalent to the "destination end office" since it provides equivalent functionality to the "end office." Therefore, Lewis teaches *the second switch configured to direct traffic data of the first traffic type to a destination end office and the second traffic type to another type of destination network element.*

Rejection Under 35 USC 103

On page 17 of the remarks, regarding claims 9, 14, 30, and 31, the Applicant argues Lewis does not disclose, teach, or otherwise make obvious *the second switch configured to direct traffic data of the first traffic type to a destination end office and the second traffic type to another type of destination network element.* The Examiner respectfully disagrees for the same reasons as stated above.

### ***Conclusion***

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Donald L. Mills whose telephone number is 571-272-3094. The examiner can normally be reached on 8:00 AM to 4:30 PM.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi Pham can be reached on 571-272-3179. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2616

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Donald L Mills/

June 22, 2007

  
WELLINGTON CHIN  
SENIOR PATENT EXAMINER